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COE 197S 2s2021 ME8 Activity 05: VOLUMES

I. SETTING UP THE SERVER

1. Run Apache HTTPD server with updated index.html file.

```
C:\Users\Richard Mendoza>docker run --rm -d --name apache -p 80:80 httpd:2.4
Unable to find image 'httpd:2.4' locally
2.4: Pulling from library/httpd
42c077c10790: Pull complete
77a357ba66a8: Pull complete
c56c780a8904: Pull complete
90bcc5e941a7: Pull complete
571750298b32: Pull complete
Digest: sha256:c479bec894c5a7f8878b28e52d03cc95b1e784612ecd01ac7c7394fc5fa2e6e2
Status: Downloaded newer image for httpd:2.4
46aeaf3239909f2a86e248918f287542a77fab4df8dd6123c5c668fd175464e2

C:\Users\Richard Mendoza>curl localhost
<html><body><h1>It works!</h1></body></html>

C:\Users\Richard Mendoza>docker cp index.html apache:/usr/local/apache2/htdocs/

C:\Users\Richard Mendoza>curl localhost
<html><body><h1>It works in Docker!</h1></body></html>
C:\Users\Richard Mendoza>docker stop apache
apache
```

2. A possible data problem: autoremoval of container when stopped in the HTTPD server

```
C:\Users\Richard Mendoza>docker stop apache
apache

C:\Users\Richard Mendoza>docker run --rm -d --name apache -p 80:80 httpd:2.4
289e26d87412d27cd7cfd3a82e67bdf9438e745dabb97a5e7a14d90c6ce61eaf

C:\Users\Richard Mendoza>curl localhost
<html><body><h1>It works!</h1></body></html>
```

II. MANAGING VOLUMES

```
C:\Users\Richard Mendoza>docker volume ls
DRIVER     VOLUME NAME

C:\Users\Richard Mendoza>docker volume create myvolume
myvolume

C:\Users\Richard Mendoza>docker volume ls
DRIVER     VOLUME NAME
local      myvolume

C:\Users\Richard Mendoza>docker volume rm myvolume
myvolume

C:\Users\Richard Mendoza>docker volume ls
DRIVER     VOLUME NAME
```

III. MOUNTING VOLUMES ON CONTAINERS

```
C:\Users\Richard Mendoza>docker volume create httpd_htdocs
httpd_htdocs
```

```
C:\Users\Richard Mendoza>docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
14a020a5154637ff017143303c93209d27b41bf8f20fb70befc08f7473f39cce

C:\Users\Richard Mendoza>docker cp index.html apache:/usr/local/apache2/htdocs

C:\Users\Richard Mendoza>curl localhost
<html><body><h1>It works in Docker!</h1></body></html>
C:\Users\Richard Mendoza>docker stop apache
apache

C:\Users\Richard Mendoza>docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
c51bca7ea8b90bd4d454dcb120188c44b4f6c6e3f7a3d3d90896a13f4b7fb998

C:\Users\Richard Mendoza>curl localhost
<html><body><h1>It works in Docker!</h1></body></html>
C:\Users\Richard Mendoza>docker stop apache
apache

C:\Users\Richard Mendoza>docker volume rm httpd_htdocs
httpd_htdocs

C:\Users\Richard Mendoza>docker volume ls
DRIVER    VOLUME NAME
```

IV. MOUNTING HOST DIRECTORIES ON CONTAINERS

```
C:\Users\ME8_act5>docker run --rm -d --name apache -p 80:80 -v C:/Users/ME8_act5/:/usr/local/apache2/htdocs/ httpd:2.4
b534359522eb33054acc522bd5b901d64790e1072dd68bcdcbe1f87b1095aa71

C:\Users\ME8_act5>curl localhost
<html><body><h1>It works in Docker!</h1></body></html>
C:\Users\ME8_act5>curl localhost
<html><body><h1>KAKAYANIN KO 'TO!</h1></body></html>
C:\Users\ME8_act5>
```

//Moved folder since one folder's name has a space: "Richard Mendoza"

```
C:\Users\Richard Mendoza>docker run --rm -d --name apache -p 80:80 -v C:/Users/Richard Mendoza/:/usr/local/apache2/htdocs/ httpd:2.4
docker: invalid reference format: repository name must be lowercase.
See 'docker run --help'.
```